

KVK EAST KHASI HILLS NEWSLETTER



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From Programme Coordinator Desk



It is a matter of great pleasure for me and my entire team that Krishi Vigyan Kendra East Khasi Hills district Meghalaya is publishing its fourth volume first issue Newsletter for all readers. This publication will highlight different activities and achievements of KVK from January to June 2013 on the mandated activities like OFTs, FLDs, Trainings and other Extension activities performed by KVK, East Khasi Hills. I, on behalf of the entire team take this opportunity to acknowledge the suggestion and constant encouragement received from Dr A.K. Gogoi ZPD, Zone III and Dr R.B. Dympep Ex Director of Agriculture Government of Meghalaya. I would also like to extend my sincere gratitude to all our farmers' friends and well wisher in translating our dream into reality.

Smt. I. Kharkongor Programme Coordinator KVK, East Khasi Hills, Upper Shillong

ACTIVITIES OF THE KVK

Krishi Vigyan Kendra, East Khasi Hills in its endeavor to bring about technology from the various research stations nearer to the farmer, has been able to act as a bridge between the two. The centre has been fulfilling the mandates given to it through its various activities. Apart from the mandated activities, the centre through its scientists acts as a change agent for bringing about attitudinal changes in the outlook of the farmers towards society in general and to agriculture in particular.

ON FARM TRIALS

On Farm Trials on eleven new technologies were conducted under different disciplines in various operational villages of the district. There were a number of trials under each of these technologies. The results of these ongoing trials are still awaited. The discipline wise OFTs are as follows:

Agronomy:

On farm trials were conducted for four new technologies on Rice, Maize and Groundnut. In maize and groundnut, introduction and varietal performance was carried out for HQPM-I and ICGS 76 varieties respectively in twenty one (21) trials covering an area of 2.25 ha. In Rice, two technologies covering Resource Conservation Technology (RCT) and an evaluation of SARS series (3 upland and 1 lowland cultivars) was carried out in four (4) trials covering an area of 1 ha.



Nursery raising of paddy at Diengpasoh



RCT field



SARS series of upland rice at Diengpasoh



Standing crop of Upland paddy SARS series

OFT on introduction and varietal performance HQPM-1



Standing crop of HQPM-1 at Mawreng



OFT on introduction and varietal performance of groundnut var. ICGS 76 at Mawklot



Standing crop of Groundnut var. ICGS 76 at Mawreng

Horticulture:

The crops in which recent technologies were undertaken for OFT in Horticulture included King Chilli, Gerbera, Brocolli and Potato. Trials on scientific package of practices of Brocolli, Gerbera and King Chilli as per technology from research institutions were undertaken in 11 trials in an area of 1.53 ha. OFT on potato under introduction and popularization of HYV (var. *Kufri Girdhari*) were carried out in 2 trials covering an area of 1 ha.



Potato planted in lines at Sadew village



Standing crop of potato var. Kufri Girdhari at Sadew



OFT on Low volume High Value crops (King Chilli) at Mawklot



OFT on Low volume High Value crops (King Chilli)



OFT on Export potential ornamental crops (Gerbera)



Blooming Gerbera flowers in farmers field



OFT on Exotic vegetable production (Broccolli)



Standing crop of Brocolli

Plant Protection:

On farm trial on tomato using trichocards (*Trichogramma brasiliensis*) was initiated for controlling tomato fruit borer. Altogether 8 trials were conducted covering an area of 1 ha. The cards were requisitioned from the State Biological Control Laboratory of the Department of Agriculture situated at Upper Shillong.



OFT on Use of Bio control agent(Trichogramma brasiliensis) card on Tomato



Standing crop of Tomato at Diengpasoh

Agricultural Extension:

On farm trials and studies on socio economic aspect of a farming community were initiated during the reporting period. Technology Backstopping on the production of low volume high value crops (King Chilli) and assessment and identification of problems in marketing agricultural products through PRA

techniques was carried out in five operational villages.



Group Discussion on the various aspects of King Chilli cultivation



PRA on assessment and identification of problems in marketing agricultural products

OFTs Completed:

A total of eight technologies and social concepts under On Farm Trials were completed during January – June 2013. Table I shows the On Farm Trials which were completed during the reporting period along with the results and feedback from the concerned SMSs.

Table I: Result and feedback of OFT completed during January-July, 2013

Crop/ Social	Assessment/	Results	Feedback
Concept	Refinement		
Onion	Refinement	Through bulb	B:C Ratio
	done in	Yield: 15.4 t/ha	Bulb – 3.52
	sowing time	Pl. height: 51.33cm	Seed - 2.01
	to compare	No.of bulblets/bulb:2.66	Feedback
	yield	No. of leaves/bulb:13	In higher elevation (1500-
	between		1700 m), it was observed
	seeds	Through seeds	that the use of bulb for
	and bulb	Yield: 6.8 t/ha	onion production was more
	propagation	Pl. height: 47.8cm	economical.
	of onion var.	No. of leaves/bulb:9	
	Pusa Red		

Crop/ Social Concept	Assessment/ Refinement	Results	Feedback
Maize	Assessment on varietal performance of HQPM 1	HQPM 1 Yield – 6.2 t/ha Avg. Plant ht 159.4 cm No. of cobs/ plant - 2.5	B:C Ratio – 2.07 The variety is suitable both for kharif and rabi season. Availability of HQPM seeds as composite variety will enable seed production by farmers
Lentil	Assessment on Varietal performance and introduction of Lentil var. Moitree	Moitree var. Yield-0.93 t/ha Plant ht35.2 cm Test wt16.43 g Crop duration-85-90 DAS	B:C Ratio – 2.24 Farmers are willing to cultivate this variety due to its short duration which helps to avoid pre monsoon showers
Cauliflower	Assessment of seed production in low cost polyhouse	Yield: 0.005 t/ha	B:C Ratio – 6.7 From each plant, 40 gms of seeds were obtained. The production of seeds in protected condition is 4 times more than in open condition. Income of the farmers increased from Rs. 44,800 to Rs. 75,200 per unit area (100 m²)
Brocolli	Assessment and Introduction of Brocolli	Yield: 15.2 t/ha No. of curds/plant:1 No. of leaves/plant:13 Wt. of curd/plant:100g	B:C Ratio - 5.93 The introduced crop was sown using only FYM. Farmers received a good price at the market
Evaluation	Assessment and evaluation of SMS messages broadcasted by Intelligent Advisory System for Farmers	Messages required Package of practices of various vegetables- 38.46% Time of sowing, transplanting and planting based on meteorological data- 24.62% Livestock management- 23.07% Appropriate time for messages Anytime-58.46% Evening-26.15%. Advisories most required Time of sowing- 30.76% Disease management and pesticide management- 29.23%	Advisories may be pushed to the farmers at anytime and evening time is the most convenient. Advisories covering package of practices, reminder of planting season and on livestock data may be forwarded.

Crop/ Social Concept	Assessment/ Refinement	Results	Feedback
Participatory Rural Appraisal (PRA)	Assessment and identification of problems and probable solution	Key issues/ problems include unavailability of quality seeds and planting materials, lack of knowledge of nutrient management of crops and method of application, quality control assessment, lack of linkages with financial institutions.	PRA Technique has brought about a better understanding of the problems and their probable solution with the active participation of the farmers.
	Market potential analysis of Diengpasoh village	No market available in the particular village. Nearest market available is 30 kms where they sell their produce. Villagers depend on the main market for all their essential commodities like rice, agricultural implements, clothes etc.	Recommendations of Farmers: Formation of a agricultural marketing society among progressive farmers within the village to help with the transport of agricultural produce. Establishment of more fair price shops in the vicinity of the village for the availability of essential commodities within the village itself.

FRONT LINE DEMONSTRATION:

Front line demonstrations were conducted under various disciplines during a particular period. During the month of April, fifteen numbers of frontline demonstration were started on-raising of Kitchen garden, Maize and legume crop intercropping and Product performance of GF2 in controlling Soft rot of ginger at Laitjem, Mawsiatkhnam, Mawklot, Diengpasoh, Mawkynrew,

Maweitnai, Sadew and Laitkynsew villages benefitting 71 farmers. During June and July, seven demonstrations on SRI, Effect of broadcasting method of Lime application on yield of rice and Composite fish culture were initiated involving 32 farmers. Results of front line demonstrations which were initiated in the earlier reporting period and completed during the current period are shown below in table II.

Table II: Results and Feedbacks of Completed FLD during January-June 2013

	_	,
Technology	Results	Feedback
Demonstrated		
Cultivation of	Avg Yield: 3.42 t/ha	The technology can further be
rabi maize with	Avg Plant Height: 150.2 cm	encouraged and tried in the warmer
the recommended	Avg Net Return: Rs. 10,723/ha	parts of the district. However, farmers
package of	B:C Ratio: 1.3	in the colder areas with no irrigation
practices		facilities are finding difficulties to follow
		the technology as water scarcity was
		more in the season.
Cultivation of	Avg Yield: 12.0 t/ha	The technology was accepted by the
pea (pulse) with	Avg Net Return: Rs.6,220/ha	farmers
recommended	B:C Ratio: 1.19	
package of		
practices		
Popularization of	Avg Yield: 7.46 t/ha	Pods are firm. Filled with 7-9 seeds,
Azad Pea	Avg Net Return: Rs. 1,79,393/ha	plant height was around 60-70
	B:C Ratio: 4.23	cms. Pod/plant: 25-39. Farmers are
		satisfied with the outcome of the
		technology demonstrated due to its high
		return.



Lime application through broadcasting method at Mylliem



FLD on maize inter cropping with legumes



FLD on SRI at Baniun



Dehaulming of potato stem at Sadew



FLD on use of *T. brassicae* for controlling cabbage butterfly



Demonstration on Kitchen Garden



Harvesting of ginger crop at Diengpasoh



Demonstration on Kitchen Garden for Urban areas

Training Programmes Conducted:

The Subject Matter Specialists of the centre conducted a total of fifty one (51) on and off campus training programmes for the benefit of 1352 farmers, farm women and rural youths. The topics and methods of the training programmes were selected carefully taking into consideration the training needs of the beneficiaries. An overview of the trainings conducted by the Subject Matter Specialist of the centre is given in Table III.

Table III: Overview of Training Conducted by KVK, East Khasi Hills during January-June 2013

Discipline	On Campus (Nos)	Off Campus (Nos)	Total Beneficiaries
Agronomy	8	3	264
Horticulture	11	15	712
Plant Protection	1	3	73
Extension	1	2	58
Fishery	1	1	65
Animal Husbandry	5	0	180
Total	27	24	1352





Off Campus Trainings





On Campus Trainings

EXTENSION ACTIVITIES

Field Days

In the reporting period, nine numbers of field days were conducted in the farmers field in order to display the advantages of the new technology demonstrated over the farmers practice in their field. During these field days, 92 farmers were benefitted in the villages where the OFTs and FLDs were conducted.



Field Day on Potato (var. Kufri Girdhari)



Field Day on Lentil var. Moitree

Diagnostic / Scientist visit

A total of one hundred and fourteen (114) diagnostic and scientist visits were conducted by the Programme Coordinator along with the SMSs of the centre. Out of these, thirty nine (39) numbers of diagnostic visits were done in which the scientist from the centre were able to provide on the field, solutions and advices to the problems faced by one hundred and seventy two (172) farmers.

During the visits to the field, the team of **Farmers visit:** scientists from the centre were able to get a first hand experience on the problems faced by the rural community.



Tikka disease of groundnut



Maize infested with cob borer



Wilt disease symptom in tomato



Alternaria leaf spot in chilli

Farmers from the operational villages regularly visit the centre to attend on campus training and also to seek assistance regarding problems faced in the field and information on schemes provided by various line departments. In thirty five (35) such visits, a total number of one thousand one hundred and seventy five (1175) farmers were benefitted.



Farmers visiting the seed production unit at Laitjem

Method Demonstration

A total of twenty four (24) method demonstrations were conducted by the Subject Matter Specialists (SMS) of the centre. The number of farmers and farm women benefitted from the demonstration were four hundred and forty three (443) who expressed great satisfaction over the manner in which these demonstrations were conducted as they were informative and practical in nature.



Line sowing of Potato on raised bed at Pongtung



Demonstration on use of *Trichoderma viridae* for soil sterilization

Exposure visit

Two numbers of exposure visits to the poultry production farm of the State Veterinary Department at Kyrdemkulai in Ri-Bhoi district was arranged for the trainees from different operational villages. The objective of the programme was to expose the farmers to the recent advances in broiler production and also to inculcate in them an entrepreneurial outlook towards agriculture and allied sectors. The programmes were attended not only by the farmers but a number of rural youths as well.



Exposure visit to Kyrdemkulai farm



Farmers interacting with an expert during the Exposure visit

Publications:

A leaflet entitled "Ka Rep Kyrpong Iing" or "Kitchen Gardening" was produced by the Centre and released during the Annual Zonal Workshop by Dr. A.K. Gogoi, Zonal Project Director, ICARNEH on the 27th May 2013.

A bi annual Newsletter of the KVK was published during the session July to December 2013.

KA REP KYRPONG IING

KRISHI VIGYAN KENDRA East Khasi Hills district Upper Shillong - 793009



Newspaper coverage/ Publicity:

A total number of 3 coverages were compiled in two Newspapers and an International Newsletter (WWF) on the activities of KVK East Khasi Hills during the session.



Radio talk/ TV Programmes

collaboration centre in Doordarshan Kendra (DDK) Shillong produced a series on "Package of Practices of Potato" comprising of four episodes which was aired during February - June 2013. A episode on "Nursery Raising of Vegetables" was also aired during the month of July 2013. The centre also helped in producing a Documentary on **Intelligent Advisory System for Farmers** (IASF) to showcase the role played by the KVK in implementing the system.



Lectured delivered

The Programme Coordinator and SMS were invited as resource persons to deliver lectures on certain aspects of agriculture and allied sciences. Seventeen (17) such programmes were attended for which two hundred and ninety five (295) farmers were benefitted.



Film Show

Film shows were shown to trainees during various on and off campus training programmes. The film show ranged from HQPM, SRI, Rice cum Fish Culture, Vermicompost production, etc. Twenty (20) such film shows were conducted for six hundred and seventeen (617) farmers.



WORLD ENVIRONMENT DAY CELEBRATION

Krishi Vigyan Kendra (KVK) East Khasi Hills under the Department of Agriculture, Meghalaya celebrated the World Environment Day 2013 on 5th June under the theme "Think, Eat, Save". On this occasion, an Inter School Drawing/ Painting Competition was organized on the topic "Save environment - Safe Food" which was attended by a number of schools from Upper Shillong area. The participating students from the various schools displayed great level of creativity and imagination in keeping with the topic of the competition. At the end of the competition, the first prize was bagged by Winsterborn Khongpdah of Pomlum Higher Secondary School and the second prize by Milkastar Nongkhlaw of Mystical Rose Secondary School and the third prize by Donjohny Kharkongor of Pomlum Higher Secondary School. After the programme all the students had

opportunity to plant a tree sapling with their names tagged on each sapling.

The prize distribution ceremony was attended by Mr. K.D. Kharkongor, Training Officer, Farmers District Training Centre, Upper Shillong as the Chief Guest and Smti. B. Kharshandi, Scientific Officer, State Biological Control Laboratory, Upper Shillong as the Guest of Honour apart from other officials and invitees. Speaking on the occasion, the Chief Guest reiterated the role which can be played by the youngsters in bringing about a clean and safe environment. He also stressed on the need for a holistic approach to reduce food wastage. The morning session also included an Open session in which the teachers accompanying the students were given an opportunity to share their views and observation on the topic.



Chief Guest addressing in the programme



Students participating in the drawing competition



Winners of the Drawing Competition



Students planting tree saplings after the programme

IMPORTANT EVENTS

SMS Programme Co-ordinator and (Agril. Extension) attended a Training on "Participatory Technology Evaluation and Transfer for Food Security and Income Enhancement" organized by ICAR NEH at Umiam from 12th-19th March 2013.

A 5 day training on "Skill Upgradation Training for women" was organized in collaboration with Hima Mylliem Youth Welfare Organization which was sponsored by the Nehru Yuva Kendra (NYK), Shillong from 18th-22nd March 2013.

SMS (Agril. Extension) attended a Brainstorming Session on "Improving Research in Agricultural Extension: Issues and way Forward" at College of Post Graduate Studies, CAU, Umiam on the 26th April 2013.

Programme Co-ordinator and SMS (Agril. Extension) participated in a workshop on "Agriculture and Rural Development Knowledge and Service Partners" at College of Post Graduate Studies, CAU, Umiam on the 15th May 2013.

SMS (Agronomy), SMS (Horticulture)



Dr Anand Reddy(HRD) NIAEM visit to KVK



Parliamentary Secy. In the KVK land

and SMS (Agril. Extension) attended the Workshop on Application and Use of Intelligent Advisory System for Farmers (IASF) on the 10th June 2013 at the centre. SMS (Fisheries) attended a Training on WTO and its implications on Indian Agriculture from the 10th -14th June 2013 organised by MANAGE, Hyderabad in collaboration with ICAR-NEH at Umiam.

Dr. K. Anand Reddy, Director (HRD) of National Institute of Agricultural Extension Management, Hyderabad accompanied by Dr. G.D. Dkhar, State Coordinator, State Extension Reforms visited the centre on 11th June 2013.

Dr. A.K. Gogoi, Zonal Project Director (ZPD), Zone III and Dr. S. Paul, Scientist, visited the centre to monitor the work undertaken by the centre at its farm.

Programme Co-ordinator SMS and (Horticulture) conducted training in various villages under Mawkynrew C& RD Block on "Kitchen Gardening" in collaboration with World Vision, Shillong



ZPD visit to KVK inspecting the Polyhouse



Scientists interaction with Teachers during the World Food Day celebration

EDITOR Programme Co-ordinator KVK, East Khasi Hills, Upper Shillong



KVK East Khasi Hills land

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To

